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CLAIMS

1. A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

including with each of said plurality of tines a patch proximate a tip, said patch having a thickness that is greater than an adjoining undercut portion.

1482

2. A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

forming at least a portion of each of said plurality of tines from a high yield strength electrically conducting material and including with each of said plurality of tines a portion proximate a tip, said portion having a thickness that is greater than an adjoining undercut portion.

3. A low force electrical contact of the type in which a socket is provided that includes a plurality of tines, each

of said plurality of tines adapted to extend radially away from a center, wherein the improvement comprises:

providing at each of said plurality of tines a first stage proximate a base that includes a first inner diameter and a second stage that is disposed at the base at one end thereof and which extends therefrom to a distal end and where the second stage includes a second inner diameter at said one end thereof that is greater than the first inner diameter and wherein each of said plurality of tines includes a patch proximate a tip, said patch having a thickness that is greater than an adjoining undercut portion.

4. A low force electrical contact, comprising:

(a) a socket;

(b) a plurality of tines disposed in said socket, at least a portion of each of said tines formed of a high yield strength of metal;

(c) means for receiving a pin in said socket, wherein said pin includes a first center longitudinal axis that

is not in parallel alignment with a second center longitudinal axis of said socket, and

(d) means for connecting a wire to said socket.

5. The low force electrical contact of claim 4 wherein each of said tines includes a first stage and a second stage, said first stage having a first wall thickness that is thicker than a second wall thickness of said second stage that is disposed proximate to said first stage and which extends therefrom toward a tip of each tine.

6. The low force electrical contact of claim 4 wherein said means for receiving a pin in said socket includes providing an undercut portion in each of said tines a predetermined distance from said tip.

7. The low force electrical contact of claim 6 wherein said undercut portion extends to said first stage.

8. The low force electrical contact of claim 6 wherein each of said tines includes a patch of material that is adapted to contact a pin, said patch being disposed intermediate said tip and said undercut portion.

9. The low force electrical contact of claim 8 wherein said patch of material includes a greater thickness of material than said undercut portion.

10. The low force electrical contact of claim 8 wherein said patch of material includes an inside diameter that is less than an inside diameter of said undercut portion.

11. The low force electrical contact of claim 4 wherein each of said plurality of tines is adapted to extend radially away from a center longitudinal axis.

12. The low force electrical contact of claim 7 wherein each of said plurality of tines is adapted to make contact with said pin along a portion of the longitudinal length of each

of said plurality of tines proximate a tip of each of said tines when said pin is inserted into said socket.

13. The low force electrical contact of claim 4 wherein each of said plurality of tines includes a set that is machined therein whereby a tip of each of said plurality of tines is normally disposed closer to a center of said socket when said socket is not mated with a pin than is a second end of each of said plurality of tines that is disposed distally from said tip.

14. The low force electrical contact of claim 4 wherein each of said plurality of tines includes a first outside diameter that is proximate a tip and a second outside diameter that is greater than said first outside diameter, said second outside diameter being is disposed at a distal end from said tip, and wherein each of said plurality of tines includes a progressive increase in the outside diameter from said tip to said distal end.

15. The low force electrical contact of claim 10 wherein said socket includes a hood having a predetermined inside

diameter that surrounds said plurality of tines, and wherein when a pin is mated inside of said socket, said plurality of tines extend radially outward a greater amount at said tip than at said distal end, and wherein a gap that exists intermediate said plurality of tines and said inside diameter of said hood is substantially identical along the longitudinal length of said plurality of tines.

16. The low force electrical contact of claim 4 wherein said means for receiving a pin in said socket is adapted to accommodate an angular misalignment of a first center longitudinal axis of said pin with respect to a second center longitudinal axis of said socket.

17. The low force electrical contact of claim 16 wherein said angular misalignment is equal to or less than three degrees in magnitude.